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# Legislative Drafting Guidelines: How Different Are They from Controlled Language Rules for Technical Writing?

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**Abstract.** While human-oriented controlled languages developed and applied in the domain of technical documentation have received considerable attention, language control exerted in the process of legislative drafting has, until recently, gone relatively unnoticed by the controlled language community. This paper considers existing legislative drafting guidelines from the perspective of controlled language. It presents the results of a qualitative comparison of the rule sets of four German-language legislative drafting guidelines from Austria, Germany and Switzerland with a representative collection of controlled language rules published by the German Professional Association for Technical Communication. The analysis determines the extent to which the respective rule sets control the same or similar aspects of language use and identifies the main differences between legislative drafting guidelines and controlled language rules for technical writing.

**Keywords:** human-oriented controlled natural language, legislative drafting, technical writing.

## 1 Introduction

Controlled languages have been described as restricted versions of natural languages: they constrain the words, phrases, syntactic constructions etc. that may be used in the composition of a text. Such restrictions have been put in place with different aims in mind: (i) to make it easier for humans to read and interpret a text, (ii) to facilitate translation (manually or by machine) into other languages, or (iii) to allow for a direct mapping onto some formal semantic representation accessible to automated reasoning.<sup>1</sup> Some researchers have consequently proposed an ideal-typical distinction between human-oriented controlled languages and machine-oriented controlled languages [14,20,21,24,27,29]. While controlled languages grounded in formal logic have mostly been developed for the purpose of requirements engineering and computer-assisted knowledge representation [9,26], controlled languages aimed at improving the understandability and translatability of texts have mainly been applied in the context of technical writing [11,17]. Some controlled languages, among them the ones based on formal logic, prescribe a relatively restrictive set of words and syntactic constructions that may

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<sup>1</sup> Occasionally, a fourth aim has been mentioned: to make texts more consistent. It can be seen as a means to achieving any one of the three aims listed above.

be used, and prohibit the use of anything else; others, especially most human-oriented controlled languages, take a more permissive approach and confine themselves to designating words and constructions that must *not* be used or only be used in a certain way, thus implicitly allowing all the rest [15].

While human-oriented controlled languages developed and applied in the domain of technical documentation have received considerable attention, the writing standards set up by guidelines for legislative drafting have gone relatively unnoticed by the controlled language community. This is somewhat surprising given that, at first glance, legislative drafting guidelines pursue aims that are similar to those pursued by controlled languages for technical writing: improving the understandability of texts containing instructions (legal instructions in the case of the former, technical instructions in the case of the latter). In this undertaking, both are bound to finding a trade-off between keeping things simple and being precise.<sup>2</sup>

This paper presents the results of a comparison of the rule sets of German-language legislative drafting guidelines from Austria, Germany and Switzerland with the compilation of controlled language rules published by the German Professional Association for Technical Communication (*Gesellschaft für Technische Kommunikation e.V. – tekom*). The analysis was aimed at determining the extent to which the respective rule sets control the same or similar aspects of language use and at identifying the characteristics that distinguish legislative drafting guidelines from controlled language rules for technical writing. The motivation behind providing such information was to get a better idea of whether and how the two domains can inform each other: whether, for instance, it makes sense for one domain to borrow rules from the other,<sup>3</sup> and whether some functions offered by automated language checkers that were developed for the domain of technical writing could also be of use to the process of legislative editing.<sup>4</sup>

The paper is organised as follows. Section 2 introduces the rule sets that were analysed for the current study. Section 3 introduces and compares the linguistic phenomena the rule sets control. Section 4 discusses the results of the comparison with regard to the scope of the rule sets, their domain-specificity and the operationalisability of the respective rules.

## 2 The Rule Sets

### 2.1 The Tekom Standard

In 2011, the German Professional Association for Technical Communication (*Gesellschaft für Technische Kommunikation e.V. – tekom*<sup>5</sup>) published a compilation of

<sup>2</sup> The conflict between precision and simplicity and the extent to which legislation can and should be understandable to non-expert citizens has been the subject of extensive and controversial debates [7,16].

<sup>3</sup> The research question approached by the present work is loosely related to the question investigated in the comparative analysis presented by O'Brien [20]: the objective of O'Brien's study was to find out to what extent a range of (mostly machine-oriented) controlled language rule sets for English shared common rules.

<sup>4</sup> The challenges in developing such a domain-specific controlled language checker for Swiss German-language legislative drafts have been described in [13].

<sup>5</sup> <http://www.tekom.de>

the most common field-tested controlled language rules for technical writing [1]. The compilation represents the state of the art in German-language technical writing and is intended to serve both as an industry standard and as a source of reference for professionals and researchers. The rules it provides constitute building blocks from which companies can develop their own in-house controlled languages. The tekomp standard has been chosen as a reference rule set for the present comparison because (i) it is representative of the language control typically employed in German-language technical writing, (ii) it is recent and reflects the state of the art and (iii) it is both grounded in professional experience and backed up by linguistic research.

The compilation comprises 39 rules concerned with sentence construction and 29 rules dealing with issues at the textual level. In addition, it provides 27 rules on spelling and word formation. However, as the standardisation of spelling is only of marginal interest to controlled language research, these last rules have not been considered in the present study. With the exception of suggestions referring to the use of specific function words, the tekomp standard does not deal with terminology and vocabulary control; it focuses on issues that can be captured in the form of rules. The same holds for the analysis presented in this paper.

## 2.2 The Legislative Drafting Guidelines

Four sets of German-language legislative drafting guidelines have been included in the comparison, namely those contained in the legislation manuals of:

- the Austrian federal administration [4],
- the German federal administration [5],
- the state administration of the Swiss canton of Bern [22],
- the state administration of the Swiss canton of Zurich [23].

The legislation manuals of the Swiss federal administration [3] and of the European Parliament, Council and Commission [8] were also considered originally. However, in contrast to the four texts listed above, the passages on language contained in these two manuals mostly remain at the level of abstract writing principles and offer only few specific drafting rules. Thus, they were less suited for a comparison with the tekomp standard and have not been included in the analysis.

Rules concerned with language only make up a small part of the aforementioned legislation manuals; the bulk of the rules deal with the formal and legal requirements that newly drafted statutes and regulations must fulfil. For the present study, however, only language-related rules have been considered. These are typically compiled in a specific chapter on legislative language and in sections on text organisation and the use of intra- and inter-textual cross references.

## 3 Analysis

In order to be able to compare the five rule sets introduced above, the rules were grouped into the two broad categories proposed in the tekomp standard: sentence-level rules and text-level rules. The rules in each group were then further sub-categorised with regard

to the linguistic phenomena they control. The sub-categories are listed in Tables 1 and 2. This classification made it possible to determine whether certain phenomena are controlled (i) by all rule sets (even if the specific rules applied to these phenomena may differ) or (ii) only by some or all of the legislative drafting guides but not by the tekomp standard or (iii) only by the tekomp standard but not by any or all of the legislative drafting guides. The results of the comparison of sentence-level rules and text-level rules are discussed in sections 3.1 and 3.2 respectively.

### 3.1 Sentence-Level Rules

Table 1 gives an overview of the distribution of sentence-level rules in the five rule sets analysed and lists the linguistic phenomena they control.<sup>6</sup> Four sub-categories of sentence-level rules have been identified, namely rules aimed at controlling (i) ambiguity, (ii) complexity, (iii) modality and tense and (iv) information structure. The remainder of this section will discuss the main characteristics that the present comparison has revealed for these four rule classes.

**Ambiguity.** Controlling ambiguity can be considered one of the prototypical tasks of a controlled language. The tekomp standard provides rules addressing issues such as attachment ambiguity (arising, for instance, when a modifier precedes or follows a coordinated phrase), anaphoric ambiguity (arising when a pronoun has more than one possible antecedent), functional ambiguity (arising when, due to the relatively free German word order, it is unclear which noun phrase is the subject and which is the direct object of a sentence) and relational ambiguity (present, for instance, in possessive phrases such as *die Untersuchung der Behörde* ‘the inspection of the agency’). To avoid certain types of scope ambiguities, the tekomp standard also contains a rule that prohibits the use of non-restrictive modifiers.

While all of the analysed legislative drafting guidelines name the avoidance of ambiguity as one of their aims, they provide only few actual drafting rules to address the problem. This finding is somewhat surprising in light of the fact that ambiguity in laws has received considerable attention in the literature [6,25,28]. The German guidelines contain general statements urging for the avoidance of attachment ambiguity, anaphoric ambiguity and relational ambiguity but offer no specific instructions. The Zurich guidelines are a bit more specific: together with a general rule on avoiding ambiguity, they list an example of attachment ambiguity and an example of plural ambiguity – note that plural ambiguity is not addressed in the tekomp standard – and explain how the respective situations can be remedied. They also contain rules stating that the antecedent of a pronoun must be located within the same article – according to the tekomp standard, it must even be within the same sentence – and that a new paragraph may only begin with a pronoun if that pronoun refers to the subject of the sentence contained in the preceding paragraph.

However, all four legislative drafting guides are very specific about the use of the conjunctions *und* (‘and’) and *oder* (‘or’) – an issue that is not covered by the tekomp

<sup>6</sup> The acronyms TK, AT, DE, BE and ZH denote the tekomp standard and the legislative drafting guidelines of Austria, Germany, Bern and Zurich respectively. Ticks in brackets denote rules that occur only implicitly, e.g. in the form of an example to a more general rule.

**Table 1.** Distribution of sentence-level rules

ID	Rule class	TK	AT	DE	BE	ZH
<i>Rules aimed at reducing ambiguity</i>						
1	Rules addressing <i>attachment ambiguity</i>	✓		✓		(✓)
2	Rules controlling the antecedents of <i>pronouns</i>	✓		✓		✓
3	Rules addressing <i>functional ambiguity (word order)</i>	✓				✓
4	Rules addressing <i>relational underspecification</i>	✓		✓		
5	Rules barring <i>non-restrictive modifiers</i>	✓				
6	Rules addressing <i>plural ambiguity</i>					(✓)
7	Rules controlling the use of “and” and “or”		✓	✓	✓	✓
<i>Rules aimed at reducing complexity</i>						
8	Rules limiting <i>sentence length</i>	✓	✓	✓		
9	Rules controlling the <i>position of the verb</i>	✓	✓	✓	✓	✓
10	Rules barring <i>embedded subordinate clauses</i>	✓	✓	✓	✓	
11	Rules barring <i>multiple subordinate clauses</i>	✓	✓	✓	✓	✓
12	Rules barring <i>chains of noun phrases</i>	✓	✓	✓	✓	✓
13	Rules barring <i>participle phrases</i>	✓	✓	✓	✓	✓
14	Rules barring <i>nominalisations</i>	✓		(✓)		✓
15	Rules barring <i>light-verb constructions</i>		✓	(✓)	✓	✓
16	Rules controlling the representation of <i>lists</i>	✓	✓	✓	✓	✓
17	Rules barring <i>double negation</i>	✓	✓		✓	
<i>Rules aimed at controlling modality and tense</i>						
18	Rules controlling the use of <i>modal verbs</i>	✓	✓	✓	✓	✓
19	Rules controlling the use of the <i>imperative</i>	✓				
20	Rules barring the use of the <i>subjunctive</i>	✓				
21	Rules stipulating the use of <i>present tense</i>	✓			✓	✓
22	Rules barring <i>unspecific provisos and exceptions</i>		✓		✓	✓
<i>Rules aimed at controlling information structure</i>						
23	Rules controlling the use of <i>passive voice</i>	✓	✓	✓	✓	✓
24	Rules controlling the representation of <i>conditions</i>	✓		✓		✓
25	Rules barring <i>multi-propositional sentences</i>	✓	✓	✓	✓	✓

standard at all. The distinction between *and* and *or* becomes particularly relevant if, in a law, an obligation, prohibition or permission is associated with a list of conditions. In such cases, it is crucial to know whether the legal consequence already takes effect if any one of the conditions is fulfilled or only if all of them are met. The analysed guidelines for legislative drafting consequently define that, unless the situation is absolutely clear from the context, the conjunction *and* must be put before the last element of a cumulative list and the conjunction *or* before the last element of an alternative list respectively. The Austrian guidelines even demand that in alternative lists, the conjunction *or* be put between all list elements. In addition, all four legislative drafting guidelines contain rules inhibiting the use of *und/oder* ('and/or') and *beziehungsweise* ('respectively').

**Complexity.** The rules that the *tekomp* standard and the legislative drafting guides apply to reduce the linguistic complexity are very similar and often even identical. Among other things, they all contain rules urging for the main verb of a sentence to be introduced as early as possible and for split verb forms, accumulations of subordinate clauses, chains of noun phrases, and complex participle phrases to be avoided. In addition, some of them put an upper boundary to sentence length and discourage authors from using nominalisations, light-verb constructions and double negations.

They also share rules requiring lists to be broken up into explicit enumerations and defining the syntactic structure that such enumerations must exhibit. These rules state, for instance, that a sentence must not be continued after an enumeration, that all elements of an enumeration must have the same syntactic structure, that no additional sentences may be inserted in the enumeration elements, and that the lead-in to an enumeration must not consist of a single pronoun. Example (1) shows a sentence that contains such an explicit enumeration:

- (1) Die Wahlbehörde kann eine Richterin oder einen Richter vor Ablauf der Amtsdauer des Amtes entheben, wenn diese oder dieser:
  - a. vorsätzlich oder grobfahrlässig Amtspflichten schwer verletzt hat; oder
  - b. die Fähigkeit, das Amt auszuüben, auf Dauer verloren hat.

'The electoral authorities may remove a judge from office before he or she has completed his or her term if he or she:

- a. has wilfully or through gross negligence committed serious breaches of his or her official duties; or
- b. has permanently lost the ability to perform his or her official duties.'

Incidentally, most of the rules comprised in this category are also available to automatic assessment by state-of-the-art controlled language checkers [1,10]. Here, legislative drafters could thus benefit more or less immediately from the technical advances brought about by the domain of technical writing.

**Modality and Tense.** The expression of modality is central to both technical writing and legislative drafting as it defines the pragmatic effect that the texts have in the real world. Accordingly, the rules controlling modality are well developed both in the *tekomp*

standard and in the four legislative drafting guides. However, while the two problems discussed above – ambiguity and complexity – have resulted in rules that are more or less domain-independent, modality is an issue that has led to rules that are highly specific to the respective text type. While in technical writing, the imperative plays a crucial role in expressing instructions, legislative writing employs the indicative and modal verbs.

The tekomp standard contains several rules concerned with the use of the imperative; the four legislative drafting guidelines, in contrast, make no mention of the imperative. This does not mean that the use of the imperative would be permitted in legislative texts; it is rather so unlikely that anybody would try to use the imperative mood in a legislative text that providing a rule explicitly prohibiting it must have seemed unnecessary.

Conversely, while the tekomp standard simply interdicts the use of modal verbs, the four legislative drafting guides contain several rules on how to use such verbs: obligations must either be marked by *müssen* ('must'), *haben zu* ('have to') or *sein zu* ('be to'), or they can simply be put in indicative mood since statements contained in a law are, by definition, obligational. Permissions must be expressed with the modal *können* ('can'). The guidelines of Austria, Zurich and Bern prohibit the use of the modal *sollen* ('should'), whereas the German guidelines restrict its use to a special, less binding type of provision ("Soll-Vorschriften"). On a related note, the former three guidelines furthermore interdict the introduction of unspecified provisos and exceptions as expressed, for instance, by the adverbs *grundsätzlich* ('principally') and *in der Regel* ('as a general rule').

The use of present tense is explicitly stipulated by the tekomp standard as well as the legislative drafting guides of Zurich and Bern. They also include rules prohibiting the use of future tense and, in the case of the Zurich guidelines, the use of future-related adverbs such as *neu* ('now') in example (2):

- (2) Die Benutzung der Anlagen unterliegt *neu* einer Gebühr von Fr. 150.

'The use of the premises is *now* subject to a fee of 150 francs.'

**Information Structure.** Writing principles relating to information structure, as crucial as they are for the composition of accessible texts, are difficult to boil down to concrete controlled language rules. The relative abstractness and indeterminacy of rules aimed at controlling the use of passive voice is symptomatic of this fact. Both the tekomp standard and the four legislative drafting guidelines contain general statements discouraging authors from using passive voice. However, the tekomp standard and the legislative drafting guides of Germany, Bern and Zurich relativise this rule by saying that, under certain circumstances, passive voice is to be preferred to active voice: for instance, if there is no specific addressee or if the focus of the sentence should be on the action rather than the agent.<sup>7</sup> The tekomp standard and the German legislative drafting guide further specify that sentences in passive voice with the agent added as a prepositional object with *von*, *durch* or *seitens* ('by') are to be avoided.

The problem of insufficient specificity also arises with the rule that a sentence should not make multiple statements. Although this rule seems to be relatively straightforward,

<sup>7</sup> The legislative drafting guide of the Swiss federal administration mentions the rule that passive voice must be avoided as an example of an overly simplistic writing principle [3].



the detection (manually or by machine) of sentences violating it is far from trivial. In order to become operational as a controlled language rule, this writing principle needs to be concretised by explicitly prohibiting specific structures indicating the presence of a multi-propositional sentence. The tekomp standard contains one such concretisation in the form of a rule barring main clause coordination. It has been shown that there is a number of further constructions that reveal the presence of more than one statement in a sentence [12]. Relative clauses introduced by the relative adverb *wobei* ('whereby'), for instance, usually introduce an additional statement, as illustrated in example (3).

- (3) Die berufliche Vorsorge wird durch die Beiträge der Versicherten finanziert, *wobei* die Arbeitgeberinnen und Arbeitgeber mindestens die Hälfte der Beiträge ihrer Arbeitnehmerinnen und Arbeitnehmer bezahlen.

'The occupation pension scheme shall be funded from the contributions of those insured, *whereby* employers must pay a minimum of one half of the contributions of their employees.'

Provided that there is specialised linguistic research into the properties of legislative language, there is thus still room for the development of more specific controlled language rules that can help legislative drafters avoid multi-propositional sentences.

The construction of conditional clauses is controlled both by the tekomp standard and by the four legislative drafting guides in question. While the tekomp standard only allows conditional clauses introduced by the conjunction *wenn* ('if'), the legislative drafting guides are more permissive and allow for the whole palette of options available in natural language: conditional clauses introduced by various conditional conjunctions (e.g. *wenn, falls, sofern*), conditional clauses in the form of relative clauses (e.g. *wer ...* 'whoever ...') and conditional clauses constructed by means of inversion (*Sind alle Auflagen erfüllt, ...* 'Have all requirements been met, ...'). The tekomp standard also prohibits the use of *sobald* ('as soon as') to introduce conditions because they could be mistaken for temporal relations. This rule does not appear in the legislative drafting guidelines but would certainly make sense there too.

The German and the Zurich guidelines, in turn, further specify the use of other conditional conjunctions: while *wenn* and *falls* ('if') are to be used to introduce absolute conditions (the consequence comes into effect if the condition has been met), the conjunctions *soweit* and *solange* ('to the extent') must only be used to express gradual conditions (the consequence comes into effect to the extent to which the condition has been met); the conjunction *sofern* ('so far as') is used in the former sense in Zurich and in the latter sense in Germany.

### 3.2 Text-Level Rules

Table 2 gives an overview of the distribution of text-level rules in the five rule sets analysed and lists the linguistic phenomena they control. Four sub-categories of text-level rules have been distinguished, namely rules controlling (i) text structure, (ii) cross references, (iii) discourse structure and (iv) content types.

**Text Structure.** Understandability does not end at the level of sentence construction: text structure is also an important factor. All four legislative drafting guides contain

**Table 2.** Distribution of text-level rules

ID	Rule class	TK	AT	DE	BE	ZH
<i>Rules aimed at controlling text structure</i>						
26	Rules controlling the <i>levels of text divisions</i>		✓	✓	✓	✓
27	Rules controlling the <i>length of text divisions</i>		✓	✓	✓	✓
28	Rules controlling the <i>form of division headers</i>	✓		(✓)		(✓)
<i>Rules aimed at controlling cross references</i>						
29	Rules controlling the form of <i>cross references</i>	✓	✓	✓	✓	✓
30	Rules barring unnecessary or vague <i>cross references</i>	✓	✓	✓	✓	✓
31	Rules barring <i>cross reference chains</i>		✓			✓
32	Rules barring <i>cataphoric cross references</i>				✓	✓
<i>Rules aimed at controlling discourse structure</i>						
33	Rules stipulating <i>general-specific order</i>		✓	✓	✓	✓
34	Rules stipulating <i>rule-exception order</i>				✓	✓
35	Rules stipulating <i>chronological order</i>				✓	✓
36	Rules stipulating the use of <i>discourse markers</i>		✓	✓	✓	
<i>Rules aimed at controlling content types</i>						
37	Rules barring <i>declarative statements</i>		✓		✓	✓
38	Rules controlling the use of <i>statements of purpose</i>		✓	✓	✓	✓
39	Rules controlling the use of <i>definitions of terms</i>	✓	✓	✓	✓	✓
40	Rules controlling the use of <i>subject-matter definitions</i>	✓		✓		✓

rules that determine what levels of text divisions (parts, chapters, sections, subsections, articles, paragraphs) are available and at what point a level of text division should be introduced or removed. The most common rules in that regard define that a text division has to be broken up into smaller units if it comes to contain more than a certain number of articles (20 according to the Austrian and German rules; 12 according the rules of Bern and Zurich), that an article should not consist of more than a certain number of paragraphs (8 in Austria, 5 in Germany, and 3 in Bern and Zurich) and that a paragraph should not contain more than a certain number of sentences (3 in Germany, 1 in Bern and Zurich). While the tekomp standard contains a rule restricting the length of sentences, it does not make any suggestions as to the ideal length of supra-sentential text units.

However, the tekomp standard does not ignore text structure completely: it contains a range of rules defining the linguistic properties of good division headers. Such rules are in turn mostly missing from the legislative drafting guides. Only the drafting guides of Germany and Zurich contain a rule stating, in a very unspecific way, that article headers and marginal titles should be short and keyword-like.

**Cross References.** Rules controlling the use and form of intra- and inter-textual cross references take up a comparatively large section in all four legislative drafting guides. These rules represent domain-specific concretisations of the more general principles set

up in the tekomp standard demanding that cross references be marked consistently, that they be sufficiently specified and that vague or unnecessary cross references be avoided. Some of the legislative drafting guides additionally rule out cross reference chains and cataphoric cross references.

**Discourse Structure.** Ambiguity can also arise if the discourse relation holding between two statements or groups of statements is unclear. Furthermore, a well-organised discourse structure makes a text easier to access and understand. Legislative drafting guidelines thus discuss the relations that may hold between discourse segments and the order in which they are to be arranged. All four legislative drafting guidelines stipulate that general statements are to precede more specific ones, and the guidelines of Bern and Zurich concretise this principle by stating in addition that rules must precede their exceptions. They also stipulate the arrangement of discourse segments in the chronological order in which the actions described therein are meant to occur.

The guidelines of Austria and Bern further recommend the use of adverbs such as *jedoch* ('however') and *ferner* ('moreover') to mark the discourse relations holding between consecutive sentences, and all but the Zurich guidelines stipulate the use of adverbs such as *insbesondere* ('particularly') and *beispielsweise* ('for example') to mark the discourse relation holding between abstract rules and concrete examples. In contrast to the guidelines for legislative drafting, the tekomp rule set does not address the issue of ambiguity arising from unclear discourse relations.

**Content Types.** All four legislative drafting guides contain rules about the types of content that do or do not belong in legislative texts. Declarative statements such as descriptions, explanations, justifications, background information or appeals are to be avoided. Statements of purpose are not permitted either, unless they occur in a special article at the beginning of the text or if they are necessary for a provision to be applied correctly.

The tekomp standard does not include such information in the form of rules. However, in the commentary it provides with its rule set, it refers to functional design [18,19] as a technique to standardise text structure and content types in the domain of technical communication. It clarifies that some of these content types may allow declarative statements and statements of purpose while others would not, and that users must decide which of the rules proposed by the standard should be enforced in which context. Thus, parallels to the different content types defined in the legislative drafting guides do in fact exist: there too, different contexts require the application of different rules. The rule that the modal *sollen* ('should') must be avoided, for instance, only applies to the normative parts of a legislative text but not to statements of purpose.

Finally, both the tekomp standard and the four legislative drafting guides contain rules about special meta-textual content types: subject-matter definitions and definitions of terms. The use of subject-matter definitions, i.e. putting a short overview of its main topics at the beginning of a text, is encouraged by the tekomp standard and the legislative drafting guide of Germany but discouraged by the legislative drafting guide of the canton of Zurich. Both types of rule sets also set up formats for the definition of terms: the tekomp standard suggests the introduction of a glossary whereas legislative texts may define terms throughout the text. The German guidelines additionally state that, in long

texts, all definitions of terms should be contracted in a specially designated article at the beginning of the text. However, although legal definitions are checked for a whole number of requirements in editorial practice [2], specific rules explicitly controlling them are relatively sparse in all four legislative drafting guides.

## 4 Discussion

The motivation behind the current study was to get a better idea of whether and how guidelines for legislative drafting and controlled language rules for technical writing can inform each other: whether it makes sense for one domain to adopt rules devised by the other, and whether automated language checkers developed for technical writing could also be employed in legislative drafting.

The analysis presented in the previous section has shown that, by and large, rules for German-language technical writing and guidelines for German-language legislative drafting pursue the same goals and attempt to control the same range of linguistic phenomena. Perhaps the most striking differences lie in the emphasis the two domains put on individual aspects of language. Controlled language rules for technical writing, for instance, provide detailed instructions regarding phenomena that can cause sentence-level ambiguity, whereas legislative drafting guidelines have relatively little to offer in way of controlling this aspect of language. As sentence-level ambiguity is not only ubiquitous in legislative language but can positively cause serious legal problems, it would only seem sensible if authors of future legislative drafting guidelines considered borrowing some of the rules that technical writers have put in place to control this phenomenon.

Legislative drafting guidelines, on the other hand, are relatively explicit about avoiding discourse-level ambiguity and about breaking texts up into manageable divisions and sub-divisions, while the *tekom* standard remains silent on these two issues. Here, it is thus legislative drafting that can inform technical writing: the prevention of ambiguity and the reduction of complexity does not end at the level of sentences. Taking language control to the level of discourse must be the logical next step for research in the field of controlled language, and legislative drafting offers some important suggestions as to how this task can be approached.

The analysis has also shown that with regard to the goal of reducing syntactic complexity, the two domains have adopted more or less the same rules. Incidentally, these are rules for which state-of-the-art controlled language checking is available. At present, controlled language checkers are almost exclusively employed in the domain of technical writing, but the findings of the present study suggest that they could be applied to check for the respective features in legislative texts too. Adaptations would be necessary where the two domains control the same linguistic phenomena but have come up with different rules. The most obvious example falling under this category are the ways in which modality is expressed in legislative texts and in technical documentation respectively. Here, domain-specific alterations of the rules applied by a controlled language checker that was developed for the domain of technical writing would be necessary (but also feasible) before the tool could be used to support legislative drafting.

The main area, however, in which legislative drafting guidelines can benefit from the example of controlled languages for technical writing is the specificity of the rules.

Legislative drafting guidelines have a tendency to content themselves with stating abstract writing principles rather than providing specific rules. By doing so, they run the risk of not being able to take full effect as users may struggle applying these abstract principles to concrete linguistic structures. While all analysed drafting guides provide examples with their rules, these examples often only mention a small percentage of the linguistic structures falling under the respective writing principle. Users are on their own when it comes to deciding to what other structures the principle may possibly apply. In such cases, the application of the rule easily fails – especially since language-related issues are usually not among the most pressing matters that legislative drafters have to keep in mind: legal technicalities will most likely take precedence. Controlled languages for technical writing demonstrate that it is useful and possible to concretise general writing principles in the form of more specific rules that are easy for users to memorise and apply. The present analysis suggests that for several abstract principles of legislative drafting, such concretisations can in fact be carved out – provided that appropriate linguistic research into the peculiarities of legislative language is undertaken.

Occasionally, the concretisations required for a particular writing principle can already be found in one of the other legislative drafting guides. The current study has shown that the individual legislative drafting guides are relatively eclectic when it comes to the selection of rules they include: some phenomena may be treated in detail in one guide but completely ignored or only briefly touched upon in another. However, where two guides have both decided to address a particular issue, they propose more or less concurring rules – albeit possibly to different degrees of specificity. Legislative drafting could thus benefit from what the *tekomp* standard offers for technical writing: a collection of possible rules that covers all relevant issues and from which authors of drafting guidelines can pick the building blocks they need. The present study is also a first step in that direction.

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